Listing of Claims:

1. (Previously Presented) A display apparatus for a mobile terminal for displaying a television video signal in the mobile terminal, comprising:

control means for generating a plurality of commands for execution of a television mode and a communication mode and first user data corresponding to a television picture being displayed;

a tuner for receiving a television signal of a selected channel;

a decoder for decoding the television signal received by said tuner to separate it into said television video signal, an audio signal and synchronous signals;

video processing means for, in said television mode, converting said video signal from said decoder into digital video data, scaling the size of said digital video data, processing and storing the scaled digital video data on a frame basis and outputting stored video data of a previous frame in a frame period and then outputting said first user data and, in said communication mode, stopping operations of said tuner and decoder and outputting second user data generated in said communication mode from said control means; and

display means having first and second display areas, said display means displaying said frame video data and said first user data from said video processing means respectively in said first and second display areas in said television mode, and displaying said second user data from said video processing means in said first and second display areas in said communication mode;

wherein said video processing means further comprises a format scaler for scaling a size of said video data to a predetermined frame size on the basis of said synchronous signals from said decoder; and

wherein, if the communication mode occurs when the television mode is selected, said video processing means displays the communication mode associated data in the second display area and displays the television video signal in the first display area, and block-copies the communication mode associated data and displays the block-copied communication mode associated data on the displayed television

signal when the television video signal is scaled up and displayed in the first and second display areas.

2. (Previously Presented) The display apparatus as set forth in claim 1, wherein said video processing means includes:

an analog/digital (A/D) converter for converting said video signal from said decoder into said digital video data;

first to third memories; and

a memory controller for, in said television mode, storing video data of a current frame from a format scaler in said second or third memory at the same time as outputting video data of a previous frame stored in said third or second memory, outputting said first user data stored in said first memory upon completing the output of said video data of said previous frame and repeating these storage and output operations and, in said communication mode, storing said second user data in said first memory and/or second memory and outputting the stored said second user data.

3. (Previously Presented) The display apparatus as set forth in claim 2, wherein said video processing means further includes an on-screen display (OSD) controller for designating, copying and displaying a desired area of said first user data stored in said first memory.

4. (Original) The display apparatus as set forth in claim 3, wherein said video processing means further includes an Inter Integrated Circuit (I2C) controller for transferring channel control data from said control means to said tuner in an I2C communication manner.

5. (Original) The display apparatus as set forth in claim 2, wherein:

said memory controller is adapted to output video data of a frame being displayed on said display means as a still picture in response to a capture key input; and

said control means is adapted to access said video data being output as said still picture.

6. (Original) The display apparatus as set forth in claim 2, wherein said memory controller is adapted to rotate and output a picture being displayed on said display means in response to a rotate key input.

7. (Previously Presented) The display apparatus as set forth in claim 6, wherein said memory controller is adapted to scale up and output said picture.

8. (Previously Presented) A method for displaying a television video signal in a mobile terminal with a display unit, said display unit having a video data display area and a user data display area, said method comprising the steps of:

a) determining in a standby mode whether said mobile terminal is set to a television mode or communication mode;

b) if said mobile terminal is set to said television mode, controlling a tuner to select a desired television channel;

c) receiving, by said tuner, a television signal over the selected television channel and separating, by a decoder, the received television signal into said television video signal, an audio signal and synchronous signals;

d) converting said separated video signal into video data of a current frame in response to said synchronous signals, storing the video data of the current frame and first user data corresponding to said selected channel in a memory unit, outputting video data of a previous frame stored in said memory unit to said video data display area of said display unit and then outputting said first user data stored in said memory unit to said user data display area of said display unit upon completing the output of said video data of said previous frame; and

e) if said mobile terminal is set to said communication mode, stopping operations of said tuner and decoder, storing second user data generated in said communication mode in said memory unit and displaying the stored said second user data in said video data display area and user data display area of said display unit;

wherein said step d) further comprises scaling a size of said video data to a predetermined frame size on the basis of said synchronous signals; and

wherein the method further comprises:

f) if the communication mode occurs when the television mode is selected, displaying the communication mode associated data in the second display area and displaying the television video signal in the first display area, and block-copying the communication mode associated data and displaying the block-copied communication mode associated data on the displayed television signal when the television video signal is scaled up and displayed in the first and second display areas.

9. (Previously Presented) The method as set forth in claim 8, wherein said step e) includes the steps of:

d-1) converting said separated video signal into digital video data; and

d-2) storing said video data of said current frame in a second or third memory of said memory unit at the same time as outputting and displaying said video data of said previous frame stored in said third or second memory, outputting and displaying said first user data stored in a first memory of said memory unit upon completing the output of said video data of said previous frame and repeating these storage and output operations.

10. (Previously Presented) The method as set forth in claim 9, wherein said step d-2) includes the step of, in response to a capture key input, outputting and displaying video data of a frame being displayed, as a still picture and storing the video data of the displayed still picture.

11. (Previously Presented) The method as set forth in claim 9, wherein said step d-2) includes the step of, in response to a rotate key input, rotating and outputting a currently displayed picture.

12. (Previously Presented) The method as set forth in claim 11, wherein said step d-2) further includes the step of scaling up and outputting the currently

displayed picture if the rotation is made by 90° or 270° or substantially 90° or substantially 270°.

13. (Previously Presented) A method for displaying a television video signal in a mobile terminal with a display unit, said display unit having a video data display area and a user data display area, said method comprising the steps of:

a) in a television mode, controlling a tuner to select a desired television channel;

b) receiving a television video signal, an audio signal, and synchronous signals over the selected television channel and converting the received video signal into digital video data;

c) scaling a size of said video data to a predetermined frame size on the basis of said synchronous signals;

d) storing video data of a current frame received over said selected channel and first user data corresponding to said selected channel in a memory, outputting video data of a previous frame stored in said memory to said video data display area of said display unit in a frame period and then outputting said first user data stored in said memory to said user data display area of said display unit upon completing the output of said video data of said previous frame;

e) determining a communication mode and second user data generated in said communication mode upon generation of a communication command at said step d);

f) if said communication mode is determined to be a data communication mode at said step e), displaying a television picture in said video data display area of said display unit and said second user data in said user data display area of said display unit, respectively, and returning to said step d) if said communication mode is ended; and

g) if said communication mode is determined to be a voice communication mode at said step e), displaying a television picture in said video data display area of said display unit, blocking a television audio signal to perform a voice communication function and returning to said step d) if said communication mode is ended;

wherein the method further comprises:

h) if the communication mode occurs when the television mode is selected, displaying the communication mode associated data in the second display area and displaying the television video signal in the first display area, and block-copying the communication mode associated data and displaying the block-copied communication mode associated data on the displayed television signal when the television video signal is scaled up and displayed in the first and second display areas.

14. (Previously Presented) A method for displaying a television video signal in a mobile terminal with a display unit, said display unit having a video data display area and a user data display area, said method comprising the steps of:

a) in a television mode, controlling a tuner to select a desired television channel;

b) receiving a television video signal, an audio signal and synchronous signals over the selected television channel and converting the received video signal into digital video data;

c) scaling a size of said video data to a predetermined frame size on the basis of said synchronous signals;

d) storing video data of a current frame received over said selected channel and first user data corresponding to said selected channel in a memory, outputting video data of a previous frame stored in said memory to said video data display area of said display unit in a frame period and then outputting said first user data stored in said memory to said user data display area of said display unit upon completing the output of said video data of said previous frame;

e) upon generation of a screen adjustment command at said step d), rotating and scaling up a currently displayed picture and displaying the resulting picture on said display unit at a full screen size;

f) determining a communication mode and second user data generated in said communication mode upon generation of a communication command at said step e) ;

g) if said communication mode is determined to be a data communication mode at said step f), displaying a television picture on said display unit, displaying

said second user data on a desired position of the displayed television picture in an OSD manner and returning to said step e) if said communication mode is ended; and

h) if said communication mode is determined to be a voice communication mode at said step f), displaying a television picture on said display unit, blocking a television audio signal to perform a voice communication function and returning to said step e) if said communication mode is ended;

wherein the method further comprises:

i) if the communication mode occurs when the television mode is selected, displaying the communication mode associated data in the second display area and displaying the television video signal in the first display area, and block-copying the communication mode associated data and displaying the block-copied communication mode associated data on the displayed television signal when the television video signal is scaled up and displayed in the first and second display areas.

15. (Previously Presented) A mobile terminal for performing a television mode and a communication mode, comprising:

control means for generating a plurality of commands for execution of said television mode and communication mode, first user data corresponding to a television picture being displayed and a plurality of commands for execution of said television mode or an OSD mode as a display mode when said communication mode occurs in said television mode;

a tuner for receiving a television signal of a selected channel;

a decoder for decoding the television signal received by said tuner to separate it into a video signal, an audio signal and synchronous signals;

video processing means for, in said television mode, converting said video signal from said decoder into digital video data, scaling the size of said digital video data, processing and storing the scaled digital video data on a frame basis and outputting stored video data of a previous frame in a frame period and then outputting said first user data, if said communication mode occurs in said television mode and said television mode is set as said display mode, stopping operations of said tuner and decoder, blocking said audio signal from said decoder and processing second user data

generated in said communication mode from said control unit at the same time as performing said television mode and, if said communication mode occurs in said television mode and said OSD mode is set as said display mode, stopping operations of said tuner and decoder, blocking the output of said decoder and processing said second user data; and

display means having a display area comprising first and second display areas, said display means being capable of:

a) displaying said frame video data and said first user data from said video processing means respectively in said first and second display areas in said television mode,

b) displaying said second user data from said video processing means in said first and second display areas in said communication mode,

c) displaying said frame video data and said second user data in said first and second display areas respectively if said communication mode occurs in said television mode and said television mode is set as said display mode, and

d) displaying said frame video data on said display area and displaying said second user data on a desired position of said display area on top of displayed said frame video data if said communication mode occurs in said television mode and said OSD mode is set as said display mode;

wherein said mobile terminal further comprises a format scaler for scaling a size of said video data to a predetermined size on the basis of said synchronous signals; and

wherein, if the communication mode occurs when the television mode is selected, said video processing means displays the communication mode associated data the second display area and displays the television video signal in the first display area, and block-copies the communication mode associated data and displays the block-copied communication mode associated data on the displayed television signal when the television video signal scaled up and displayed in the first and second display areas.

16. (Previously Presented) The mobile terminal as set forth in claim 15, wherein said video processing means includes:

an A/D converter for converting said video signal from said decoder into said digital video data;

first to third memories; and

a memory controller for, in said television mode, storing video data of a current frame from a format scaler in said second or third memory at the same time as outputting video data of a previous frame stored in said third or second memory, outputting said first user data stored in said first memory upon completing the output of said video data of said previous frame and repeating these storage and output operations, and, in said communication mode, if said television mode is set as said display mode, performing said operations and, if said OSD mode is set as said display mode, storing wall paper data in said third memory, storing said second user data in said first memory and/or second memory and outputting the stored wall paper data and the stored said second user data.

17. (Previously Presented) The method as set forth in claim 13, wherein step g) further includes the steps of:

g-1) displaying said second user data in said user data display area of said display unit, if said communication mode is determined to be a voice communication mode.

18. (Previously Presented) The method as set forth in claim 14, wherein step h) further includes the steps of:

g-1) displaying said second user data on a desired position of the displayed television picture in an OSD manner, if said communication mode is determined to be a voice communication mode.